	Application No.	Applicant(s)
Notice of Allowability	09/903,046	DOVIN ET AL.
	Examiner	**Art Unit**	
	Adam L. Basehoar	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Amendment After-Final filed 08/15/06.*.

2. ☒ The allowed claim(s) is/are *33-35,38-43,46-51,54-56 and 58*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some*   c)☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a)☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1)☐ hereto or 2)☐ to Paper No./Mail Date _____ .

    (b)☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

REASONS FOR ALLOWANCE AND EXAMINER'S AMENDMENT

1.   This action is responsive to communications: The After-Final Amendment filed 08/15/06.

2.   Claims 1-4, 7-15, 17-25, 28-32, 37, 45, 53, and 57 have been cancelled as necessitated by the Examiner's Amendment, which is discussed below in the Examiner's Amendment section.

3.   Claims 33, 41, 49, and 58, have been amended by the examiner, which is discussed below in the Examiner's Amendment section.

4.   Claims 33-35, 38-43, 46-51, 54-56, and 58, are allowed as necessitated by both the After-Final Amendment and the Examiner's Amendment and are discussed below in the Reasons for Allowance section.

EXAMINER'S AMENDMENT

5.   An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

6.   Authorization for this examiner's amendment was given in a telephone interview with Attorney Eunhee Park on 12/05/06.

The Application has been amended as follows:

Please Cancel Claims 1-4, 7-15, 17-25, 28-32, 37, 45, 53, and 57

Please replace claims 33, 41, 49, and 58 with the following amended claims.

Claim 33 (Currently Amended)

A dynamic client-side breadcrumbing method for improving navigation of a plurality of web pages within a Website, the method comprising:

embedding a browser script into a web page being downloaded to a web browser at a client from a web server associated with the Website, said browser script executed by said web browser for performing the steps of:

(a) programmatically generating and storing breadcrumbs associated with web pages downloaded to the web browser from the web server associated with the Website at the client, the breadcrumbs including navigation information comprising a URL associated with downloaded web pages and forming a breadcrumb navigation trail of URLs associated with the web pages visited at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy or maintaining web page relationships in the web pages themselves;

(b) setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client;

(c) downloading a subsequent web page and retrieving the time stamp corresponding to the breadcrumb navigation trail stored at the client;

(d) determining whether a time interval between the time stamp and a time corresponding to the subsequent downloaded web page exceeds a threshold, wherein the threshold was defined within the browser script of each downloaded web page; and

(e) enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the

downloaded web page if the time interval exceeds the threshold, wherein said displayed

breadcrumb navigation trail reflects a correct order of a user's navigation through an information

space of the Website.

Claim 41 (Currently Amended)

A dynamic client-side breadcrumbing system for improving navigation of a plurality of

web pages within a Website, the system comprising:

(a) a web server associated with the Website transmitting web pages requested by a

client, each of the web pages having a browser script embedded therein by said web server; and

(b) a web browser associated with the client downloading the web pages and executing

the browser script the browser script for:

i) programmatically generating and storing breadcrumbs associated with web

pages downloaded to the web browser from the web server associated with the Website at the

client, the breadcrumbs including navigation information comprising a URL associated with

downloaded web pages and forming a breadcrumb navigation trail of URLs associated with the

web pages visited at the Website without downloading from said web server any information

describing a web page's location in a web site hierarchy or maintaining web page relationships in

the web pages themselves;

ii) setting a time stamp corresponding to the breadcrumb navigation trail and

storing the time stamp at the client;

       iii) determining whether a time interval between the time stamp and a time

corresponding to a subsequent downloaded web page exceeds a threshold, <u>wherein the threshold

was defined within the browser script of each downloaded web page;</u> and

       iv) enabling resumption of navigation according to the breadcrumb navigation

trail by enabling downloading of a web page according to navigation information of a last

breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on

the downloaded web page if the time interval exceeds the threshold, wherein said displayed

breadcrumb navigation trail reflects a correct order of a user's navigation through an information

space of the Website.

Claim 49 (Currently Amended)

    A <u>computer readable</u> program storage device, tangibly embodying a program of

instructions executable by the machine to perform a dynamic client-side breadcrumbing method

for improving navigation of a plurality of web pages within a Website, the method comprising

the steps of:

    embedding a browser script into a web page being downloaded to a web browser at a

client from a web server associated with the Website, said browser script executed by said web

browser for performing the steps of:

    (a) programmatically generating and storing breadcrumbs associated with web pages

downloaded to the web browser from the web server associated with the Website at the client,

the breadcrumbs including navigation information comprising a URL associated with

downloaded web pages and forming a breadcrumb navigation trail of URLs associated with the

web pages visited at the Website without downloading from said web server any information

describing a web page's location in a web site hierarchy or maintaining web page relationships in

the web pages themselves;

(b) setting a time stamp corresponding to the breadcrumb navigation trail and storing the

time stamp at the client;

(c) downloading a subsequent web page and retrieving the time stamp corresponding to

the breadcrumb navigation trail stored at the client;

(d) determining whether a time interval between the time stamp and a time corresponding

to the subsequent downloaded web page exceeds a threshold, wherein the threshold was defined

within the browser script of each downloaded web page; and

(e) enabling resumption of navigation according to the breadcrumb navigation trail by

enabling downloading of a web page according to navigation information of a last breadcrumb

in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the

downloaded web page if the time interval exceeds the threshold, wherein said displayed

breadcrumb navigation trail reflects a correct order of a user's navigation through an information

space of the Website.

Claim 58 (Currently Amended)

A browser script embodied on a computer readable medium to be embedded into a

plurality of web pages within a Website, by a web server associated with the Website, for

execution by a client web browser for improving navigation of the plurality of web pages within

the Website, the browser script comprising:

(a) mechanism for generating and storing breadcrumbs associated with web pages downloaded to the web browser from the web server associated with the Website at the client, the breadcrumbs including navigation information comprising a URL associated with downloaded web pages and forming a breadcrumb navigation trail of URLs associated with the web pages visited at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy or maintaining web page relationships in the web pages themselves;

(b) mechanism for setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client;

(c) mechanism for determining whether a time interval between the time stamp and a time corresponding to a subsequent downloaded web page exceeds a threshold, wherein the threshold was defined within the browser script of each downloaded web page; and

(d) mechanism for enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the downloaded web page if the time interval exceeds the threshold, wherein said displayed breadcrumb navigation trail reflects a correct order of a user's navigation through an information space of the Website.

REASONS FOR ALLOWANCE

7.   The following is an examiner's statement of reasons for allowance:

Regarding independent claims 33, 41, 49, and 58, none of the references, either singularly or in combination teach or suggest to a person of ordinary skill in the art at the time of the invention the combination of features of the claim limitations. The examiner notes that while creating and dynamically displaying client side breadcrumbs (i.e. a browser navigation trail) is not itself considered a novel feature (See Examiner Referenced Prior Art), but in light of the combination of the features of the independent claims (e.g. time stamp, threshold defined within each page, correct navigation order, etc) the limitations of claims 33, 41, 49, and 58 are considered novel, and unobvious to a person of ordinary skill in the art at the time the invention was made in view of the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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US-2005/0132018	06-2005	Milic-Frayling et al.
US-6,820,111	11-2004	Rubin et al.
US-6,667,751	12-2003	Wynn et al.
US-6,243,091	06-2001	Berstis, Viktors

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121.

The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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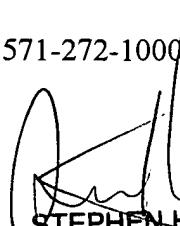
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